

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020140**Date Inspected:** 19-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Li Ping (ZPMC)**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** BAY 14 OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Robert A.DeArmond was present during the time noted above and conducted observations relative to the work being performed.

OBG BAY 14

This QA Inspector observed the following work in progress:

FCAW welding of complete joint penetration weld joint(s) located on 14W Segment 3020E Longitudinal Plate 3048-001 to Floor Beam FB3343 weld number(s) 053. Welder is identified as welder no. 201215. The welding variables recorded by ZPMC QC identified as Liu Feng appeared to comply with applicable WPS(s) WPS-B-T-2233-ESAB.

FCAW welding of complete joint penetration weld joint(s) located on 14W Segment 3020D Longitudinal Plate 3051-001 to Floor Beam FB3343 weld number(s) 035. Welder is identified as welder no. 045175. The welding variables recorded by ZPMC QC identified as Liu Feng appeared to comply with applicable WPS(s) WPS-B-T-2233-ESAB.

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## WELDING INSPECTION REPORT

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During random in process inspection of Orthotropic Box Girder; (OBG) member identified as SEG3013D weld number(s) 010. This QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Side Panel to Floor Plate identified as noted above. Welder is identified as welder no. 45221. The welding variables recorded by ZPMC QC identified as Liu Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-2G-(2F)-Repair-FCM and B-WR-19111

SAW welding of complete joint penetration weld joint(s) located on Deck Plate identified as DP3157-001 to DP3158A weld number(s) 021. Welder is identified as welder no. 05052. The welding variables recorded by ZPMC QC identified as Mr. Shao Jian Yuan appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2C-S-2.

SAW welding of complete joint penetration weld joint(s) located on Deck Plate identified as DP3157-001 to DP3157A weld number(s) 013. Welder is identified as welder no. 05052. The welding variables recorded by ZPMC QC identified as Mr. Shao Jian Yuan appeared to comply with applicable WPS(s) WPS-B-T-2221-B-L2C-S-2.

### BLASTING WELD SHOP No. 2

This QA inspector performed internal visual inspection of welds & base metal after blasting along with ZPMC and ABF Quality Assurance (QA) personnel. The member is identified as Tower Lift 4 Internal 116M to 131M. At 119 meter on Skin 'A' this QA discovered the following issues:

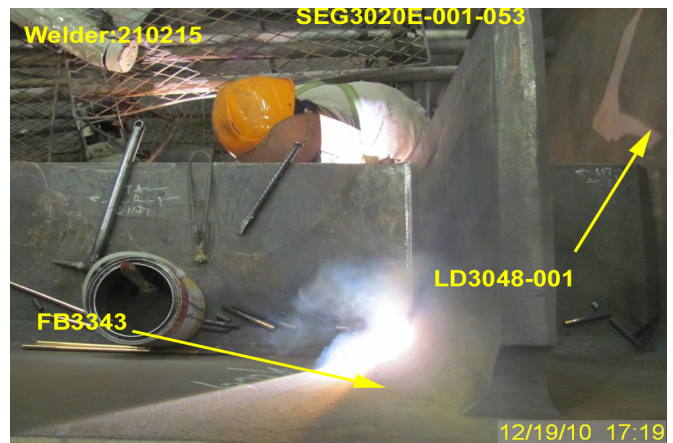
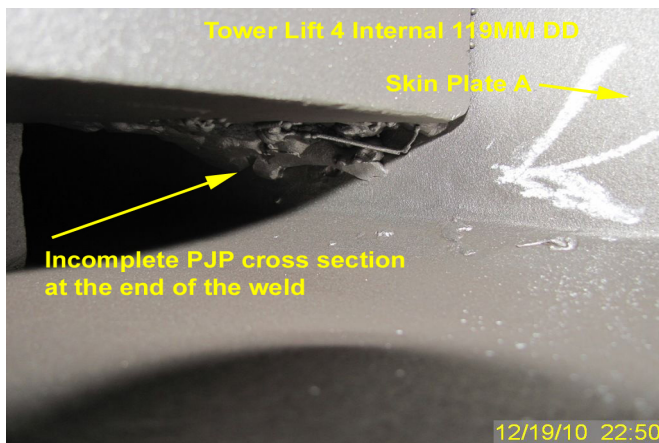
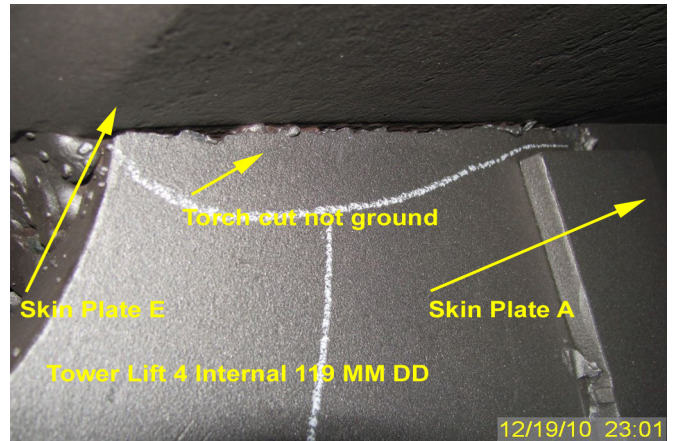
1. Base metal surface profile appears to have notches and is not ground smooth.
2. Incomplete cross-section at PJP

For further details, refer to the incident report issued on this date and the attached photos

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## Summary of Conversations:

As mentioned above between QA and QC concerning this project

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

**Inspected By:** DeArmond,Robert

Quality Assurance Inspector

**Reviewed By:** Riley,Ken

QA Reviewer